

Title (en)

Optical wiring layer, optoelectric wiring substrate, mounted substrate, and methods for manufacturing the same

Title (de)

Optisch-leitende Schicht, optoelektrisch-leitendes Substrat, montiertes Substrat und deren Herstellungsverfahren

Title (fr)

Couche d'interconnection optique, substrat d'interconnection optoélectrique, substrat monté et méthode de fabrication

Publication

EP 1041418 B1 20110601 (EN)

Application

EP 00106748 A 20000329

Priority

- JP 8856999 A 19990330
- JP 9606099 A 19990402

Abstract (en)

[origin: EP1041418A2] A first clad (504) layer is formed on a smooth support substrate (559) via a release layer (531). On the first clad layer (504), a core (501) through which light propagates and alignment marks (507, 515) are simultaneously formed. Further, these layers are covered with a second clad (506) to obtain an optical wiring layer (51). Then, the optical wiring layer (51) is released from the support substrate (559) and stuck to a substrate (52) having an electric wiring (519). Subsequently, on the resulting optical wiring layer is formed a mirror (505, 512) for reflecting light propagating through the core (501), pads (509, 510) for installing optical parts (58, 59) or the like, and via holes (523) for electrically connecting the electric wiring (519) on the substrate (52) to the pads (509, 510). For this formation, the alignment marks (507, 515) are used as references. <IMAGE>

IPC 8 full level

G02B 6/42 (2006.01); **H05K 1/18** (2006.01); **G02B 6/13** (2006.01); **G02B 6/138** (2006.01); **G02B 6/43** (2006.01); **H05K 1/02** (2006.01)

CPC (source: EP KR US)

G02B 6/138 (2013.01 - EP US); **G02B 6/42** (2013.01 - EP US); **G02B 6/4201** (2013.01 - EP US); **G02B 6/4214** (2013.01 - EP US); **G02B 6/4274** (2013.01 - EP US); **H05K 1/0274** (2013.01 - EP US); **H05K 1/18** (2013.01 - KR); **G02B 6/4224** (2013.01 - EP US); **G02B 6/4232** (2013.01 - EP US); **G02B 6/4238** (2013.01 - EP US); **G02B 6/43** (2013.01 - EP US); **H01L 2224/16225** (2013.01 - EP US)

Citation (examination)

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- DE 19523580 A1 19960208 - MOTOROLA INC [US]
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